

CLAIM AMENDMENTS

1. (Currently Amended) Apparatus for reducing mitral regurgitation, the apparatus comprising:

a ~~bendable~~ reconfigurable elongated body ~~configured~~ adapted to be inserted into the coronary sinus of a patient in the vicinity of the posterior leaflet of the mitral valve, said elongated body comprising a ~~rigid~~ distal end section and a ~~rigid~~ proximal end section, said elongated body forming a longitudinal axis between said distal end section and said proximal end section, said elongated body being reconfigurable lengthwise from a first configuration for delivery into the coronary sinus to a second contracted configuration lengthwise for exerting a force onto the posterior annulus; wherein

said distal end section comprises a distal end hollow and elongated generally cylindrically shaped ~~rigid-tube~~ section having a plurality of proximally-extending barbs disposed within a length of said distal end section and adapted to engage coronary sinus tissue;

said proximal end section comprises a proximal end hollow and elongated generally cylindrically shaped ~~rigid-tube~~ section having a plurality of distally-extending barbs disposed within a length of said proximal end section and adapted to engage coronary sinus tissue; and

~~at least one~~ a plurality of intermediate elongated generally cylindrically shaped spring segments connecting said distal end section to said proximal end section, said

intermediate spring segments each having a plurality of barbs extending therefrom and adapted to engage coronary sinus tissue;  
said ~~at least one~~ spring segments each being configured in an ~~extended~~ expanded state to provide a first length between said distal end section and said proximal end section in the first configuration, and being configured in a contracted state to provide a second length between said distal end section and said proximal end section in the second configuration, the second length being shorter than the first length, wherein said elongated body is thereby reconfigured from the first configuration to the contracted second configuration so as to urge said distal end section and said proximal end section toward one another;

each of said spring segments comprising, at least in part, undulating spring members of generally U-shaped configuration, each U-shaped portion extending substantially widthwise of said elongated body longitudinal axis;

whereby when said elongated body is inserted into the coronary sinus in the first configuration, said ~~at least one~~ spring segments contracts lengthwise to reconfigure said elongated body to assume the second configuration so as to exert the force on the posterior annulus and thereby reduce mitral regurgitation.

2. (Currently amended) Apparatus according to claim 1 wherein ~~the at least one~~ each of the spring segments comprises an elastic material, and further wherein said elastic material is stretched when said elongated body is in the first

configuration and said elastic material is relaxed when said elongated body is in the second configuration.

3. (Currently amended) Apparatus according to claim 1 wherein each of said ~~at least one~~ spring segments comprises a shape memory alloy, and further wherein a temperature transition is used to reconfigure said elongated body from the first configuration to the second configuration.

4.-13. (Canceled)

14. (Currently Amended) Apparatus for reducing mitral regurgitation, the apparatus comprising:

a ~~flexible~~ reconfigurable elongated body ~~configured~~ adapted for introduction into the coronary sinus of a patient in the vicinity of the posterior leaflet of the mitral valve, said elongated body comprising a distal end section and a proximal end section, said elongated body being reconfigurable from a first configuration for delivery into the coronary sinus to a second configuration for exerting a force onto the posterior annulus; wherein

said distal end section comprises a ~~rigid~~ distal end hollow and elongated generally cylindrically shaped ~~tube~~ section having proximally-extending barb means disposed within a length of said distal end section and adapted to engage coronary sinus tissue; and

said proximal end section comprises a ~~rigid~~ proximal end hollow and elongated generally cylindrically shaped ~~tube~~ section

having distally-extending barb means disposed within a length of said proximal end section and adapted to engage coronary sinus tissue; and

~~an~~ intermediate ~~section~~ segments connecting said distal end section to said proximal end section, said intermediate ~~section~~ segments each being configured in an extended state to provide a first length between said distal end section and said proximal end section in the first configuration, and configured in a contracted state to provide a second length between said distal end section and said proximal end section in the second configuration, the second length being shorter than the first length, wherein said elongated body is reconfigured from the first configuration so as to urge ~~said intermediate section~~ a central portion of said body toward the posterior annulus to exert a force on the posterior annulus and thereby reduce mitral regurgitation-;

each of said intermediate segments comprising, at least in part, undulating spring members of generally U-shaped configuration, each U-shaped portion extending substantially widthwise of said elongated body; and

said intermediate segments being connected to said end sections and to each other throughout the respective peripheries thereof.